Attorney's Docket No.: 17646-180001 / 19980044 Applicant: Aaron Abbott et al.

Serial No.: 09/220,436

: December 24, 1998 : 2 of 13 Filed

Page

Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

1 -2. (Cancelled)

(Currently Amended) A computer system, comprising:

a client component;

a server component comprising a dynamic-link library, saldan object represented in a dynamic link library file, the client component arranged to make requests to saidthe server component during execution of saidthe client component;

a request archive component, maintaining a representation of requests which can be satisfied by seidthe server component; and

a request intercepting component, arranged to intercept requests from saidthe client component to saidthe server component, and to determine from saidthe representation whether a request is supported by saidthe server component; and

such that said wherein the request intercepting component is arranged to search external sources to locate and provide to saidthe server component an executable implementation of functionality required for saidthe server component to support saidthe request when said request is not currently supported;

such that said wherein the request intercepting component thereafter invokes said the request on saidthe server component in a manner hidden from saidthe client component; and

such that said server component comprises an object represented in said dynamic link library sile in at least one computer program;

such-that said wherein the request intercepting component searches for said the dynamic link library file, or an updated version of saidthe dynamic link library file if a current version of saidthe dynamic link library file held on saidthe computer system does not provide the functionality of said the server component.

Attorney's Docket No.: 17646-180001 / 19980044

Applicant: Aaron Abbott et al.

Serial No.: 09/220,436

Filed: December 24, 1998

Page : 3 of 13

4-7. (Cancelled)

Serial No.: 09/220,436

: 09/220,436 : December 24, 1998

Page

: 4 of 13

Attorney's Docket No.: 17646-180001 / 19980044

8. (Currently Amended) A computer system, comprising:

a client component;

a server component comprising a dynamic link library, said an object represented in a dynamic link library file, the client component arranged to make requests to said the server component during execution of said the client component;

a request archive component, including a representation of requests which can be satisfied by saidthe server component; and

a request intercepting component, intercepting requests from saidthe client component to saidthe server component, and determining from saidthe representation if a request is supported by saidthe server component; saidthe request intercepting component being arranged to search external sources to locate and provide to saidthe server component an executable implementation of functionality required for saidthe server component to support saidthe request if saidthe request is not currently supported; and for thereafter invoking saidthe request on saidthe server component in a manner hidden from saidthe client component; and

such that said server component comprises an object-represented in said dynamic link library file in at least one computer program;

such that saidwherein the request intercepting component searches for saidthe dynamic link library file, or an updated version of saidthe dynamic link library file if a current version of saidthe dynamic link library file held on saidthe computer system does not provide the functionality of saidthe server component.

9-10. (Cancelled)

Serial No.: 09/220,436

Filed: December 24, 1998

Page : 5 of 13

Attorney's Docket No.: 17646-180001 / 19980044

11. (Currently Amended) A computer system comprising:

a client component comprising a software program;

a server component comprising an <u>object represented in the</u> operating system shell called by <u>saidthe</u> software program, <u>such that saidwherein the</u> client component is arranged to make requests to <u>saidthe</u> server component during execution of <u>saidthe</u> client component;

a request archive component for maintaining a representation of requests which can be satisfied by saidthe server component; and

a request intercepting component comprising a command interpreter, arranged to intercept requests from saidthe client component to saidthe server component, and to determine from saidthe representation whether a request is supported by saidthe server component;

such that saidwherein the request intercepting component is arranged to search external sources to locate and provide to saidthe server component an executable implementation of functionality required for saidthe server component to support saidthe request when saidthe request is not currently supported;

saidwherein the request intercepting component thereafter invokingsaidinvokes the request on saidthe server component in a manner hidden from saidthe client component; and

such that said server component comprises an object represented in said operating system shell called by said software program;

such that saidwherein the request intercepting component searches for saidthe operating system shell, or an updated version of saidthe operating system shell if a current version of saidthe operating system shell held on saidthe computer system does not provide the functionality of saidthe server component.

Serial No.: 09/220,436

Filed: December 24, 1998

Page : 6 of 13

12. (Currently Amended) A computer system comprising:

a client component, comprising a software program;

E server component comprising an <u>object represented in the</u> operating system shell called by <u>saidthe</u> software program, <u>such that saidwherein the</u> client component is arranged to make requests to <u>saidthe</u> server component during execution of <u>saidthe</u> client component;

a request archive component for maintaining a representation of requests which can be satisfied by saidthe server component; and

a request archive component maintaining a representation of requests which can be satisfied by saidthe server component; and

a request intercepting component, for intercepting requests from saidthe client component to saidthe server component, and for determining from saidthe representation whether a request is supported by saidthe server component; saidthe intercepting means comprising a command interpreter and being arranged to search external sources to locate and provide to saidthe server component an executable implementation of functionality required for saidthe server component to support saidthe request when saidthe request is not currently supported; and for thereafter invoking saidthe request on saidthe server component in a manner hidden from saidthe client component; and

such that said server component comprises an object represented in said operating system shell called by said software program;

such that saidwherein the request intercepting component searches for saidthe operating system shell, or an updated version of saidthe operating; system shell if a current version of saidthe operating system shell held on saidthe computer system does not provide the functionality of saidthe server component.

Serial No.: 09/220,436 Filed: December 24, 1998

Page : 7 of 13

13. (Currently Amended) A CORBA distributed computer system comprising:

a client component, saidthe client component being an object of saidthe CORBA distributed computer system;

a server component, saidthe server component being an object of saidthe CORBA distributed computer system, such that saidwherein the client component is arranged to make requests to saidthe server component during execution of saidthe client component;

a request archive component, maintaining a representation of requests which can be satisfied by saidthe server component; and

a request intercepting component, comprising an object request broker arranged to intercept requests from saidthe client component to saidthe server component, and to determine from saidthe representation whether a request is supported by saidthe server component; and

such that saidwherein the request intercepting component is arranged to search external sources to locate and provide to saidthe server component an executable implementation of functionality required for saidthe server component to support saidthe request when saidthe request is not currently supported;

saidthe request intercepting component thereafter invoking saidthe request on saidthe server component in a manner hidden from saidthe client component;

such that said server component is an object of said CORBA distributed computer system;

such that saidwherein the request intercepting component is invoked by the object request broker to search for saidthe object of saidthe CORBA distributed computer system, or an undated version of saidthe object of saidthe CORBA distributed computer system if a current version of saidthe CORBA distributed computer system does not Provide the functionality of saidthe server component.

Serial No.: 09/220,436

Filed: December 24, 1998

Page : 8 of 13

Attorney's Docket No.: 17646-180001 / 19980044

14. (Currently Amended) A CORBA distributed computer system comprising:

a client component, saidthe client component being an object of the CORBA distributed computer system;

a server component, saidthe server component being an object of the CORBA distributed computer system, such that saidwherein the client component is arranged to make request to saidthe server component during execution of saidthe client component;

a request archive component, maintaining a representation of requests which can be satisfied by saidthe server component; and

a request intercepting component, intercepting requests from saidthe client component to saidthe server component, and for determining from saidthe representation whether a request is supported by saidthe server component; saidthe request intercepting component comprising a command interpreter and being arranged to search external sources to locate and provide to saidthe server component an executable implementation of functionality required for saidthe server component to support saidthe request when saidthe request is not currently supported; and for thereafter invoking saidthe request on said server component in a manner hidden from saidthe client component; and

such that said server component is an object of said CORBA distributed computer system;

such that saidwherein the request intercepting component is invoked by the object request broker to search for saidthe object of said CORBA distributed computer system, or an updated version of saidthe object of said CORBA distributed computer system if a current version of saidthe CORBA distributed computer system does not provide the functionality of saidthe server component.

Serial No.: 09/220,436

Filed: December 24, 1998

Page : 9 of 13

15. (Currently Amended) A computer system comprising:

a client component;

a server component, comprising a protocol interpreter, such that said interpreter arranged to make request based on an expected vocabulary, wherein the client component is arranged to make requests to said the server component during execution of said the client component;

a request archive component, maintaining a representation of requests which can be satisfied by saidthe server component; and

a request intercepting component, arranged to intercept requests from saidthe client component to said server component, and to determine from saidthe representation whether a request is supported by saidthe protocol interpreter of saidthe server component; and

such that saidwherein the request intercepting component is arranged to search external sources to locate and provide to saidthe server component an executable implementation of functionality required for saidthe server component to support saidthe request when said request is not currently supported;

such that saidwherein the request intercepting component thereafter invokes saidthe request on saidthe server component in a manner hidden from saidthe client component; and

such that said server component comprises a protocol interpreter arranged to make request based on an expected vocabulary of the server component;

such that said wherein the request intercepting component searches for said the request, or loads the request into the vocabulary of the server component by said the protocol interpreter if a current version of said the request does not provide the functionality of said the server component.

Serial No.: 09/220,436 Filed: December 24, 1998

Page : 10 of 13

Attorney's Docket No.: 17646-180001 / 19980044

16. (Currently Amended) A computer system comprising:

a client component;

a server component, comprising a protocol interpreter, such that saidinterpreter arranged to make request based on an expected vocabulary, wherein the client component is arranged to make request to saidthe server component during execution of saidthe client component;

a request archive component, maintaining a representation of requests which can be satisfied by saidthe server component; and

a request intercepting component, intercepting requests from saidthe client component to saidthe server component, and determining from saidthe representation whether a request is supported by saidthe protocol interpreter of saidthe server component; saidthe request intercepting component being arranged to search external sources to locate and provide to saidthe server component an executable implementation of functionality required for saidthe server component to support saidthe request when saidthe request is not currently supported; and for thereafter invoking saidthe request on saidthe server component in a manner hidden from saidthe client component; and

such that said server-component comprises a protocol interpreter-arranged to make request based on an expected vocabulary of the server component;

such that saidwherein the request intercepting component searches for saidthe request, or loads the request into the vocabulary of the server component by saidthe protocol interpreter if a current version of saidthe request does not provide the functionality of saidthe server component.

Serial No.: 09/220,436
Filed: December 24, 1998

Page : 11 of 13

17. (Currently Amended) A component based computer system comprising:

a client component;

a server component comprising a local service manager, such that said manager with a set of services known to be present on the server component, wherein the client component is arranged to make requests to said the server component during execution of said the client component;

an archive request component for maintaining a representation of requests which can be satisfied by saidthe server component; and

a request intercepting component, arranged to intercept requests from saidthe client component to saidthe server component, and to determine from saidthe representation whether a request is supported by saidthe local service manager of saidthe server component; and

such that said wherein the request intercepting component is arranged to search external sources to locate and provide to said the server component an executable implementation of functionality required for said the server component to support said request when said the request is not currently supported;

such that saidwherein the request intercepting component thereafter invokes saidthe request on saidthe server component in a manner hidden from saidthe client component; and

such that said server component comprising a local service manager comprises a set of services known to be present on the server component;

such that saidwherein the request intercepting component uses the local service manager to search for an implementation of the requested service, or an updated version of the requested service if a current version of the requested service held on saidthe computer system does not provide the requested functionality of saidthe server component.

Serial No.: 09/220,436 Filed: December 24, 1998

Page : 12 of 13

18. (Currently Amended) A component based computer system comprising:

a client component;

a server component, comprising a local service manager, such that said manager with a set of services known to be present on the server component, wherein the client component is arranged to make request to said the server component during execution of said the client component;

an archive request component, maintaining a representation of requests which can be satisfied by saidthe server component; and

a request intercepting component, intercepting requests from saidthe client component to saidthe server component, and determining from saidthe representation whether a request is supported by saidthe local service manager of saidthe server component; saidthe request intercepting component being arranged to search external sources to locate and provide to saidthe server component an executable implementation of functionality required for saidthe server component to support saidthe request when saidthe request is not currently supported; and for thereafter invoking saidthe request on saidthe server component in a manner hidden from saidthe client component; and

such that said server component comprising a local service manager comprises a set of services known to be present on the server component;

such that saidwherein the request intercepting component uses the local service manager to search for an implementation of the requested service, or an updated version of the requested service if a current version of the requested service held on saidthe computer system does not provide the requested functionality of saidthe server component.